

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION RECORDS

Numbers 814 to 858

Copy

B.

U. S. Fish Commission
Dredging Record.
1880.

Locs. 814 -

Aug. 18 -

All bearings in this
book are magnetic.

Air temperatures were
taken by a Gas. Green,
thermometer, supplied by
the Navy Dept. and cor-
rected to within .5 of a deg.
It was placed in the
open pilot house.

Trawl

TEMPERATURE RECORD.

Instrument used, *Reguini-Zambra.*

Current number of observation, *814.*

Date, *Aug. 18. 1880.*

Locality, *off Block Island.*

Bearings, *Block I, Lt., N. N. W, 7/8 W.*
18 miles.

Time of day, *1 P.M.*; of tide,

State of sky, *b. c.*

Temperature of air, *72.*

" surface of water, *72. (N.Z. 4000 f.)*

x " at depth of *5* fathoms, *71° (10 f. 57) (20 f. 49.)*

" of bottom, *46. (N.Z. 42666)*

Depth, in fathoms, *27 1/2*

Nature of bottom, *sand and gravel.*

Direction of ~~surface current~~ *wind S. E.*

Force of ~~surface current~~ *wind 2.*

Direction of ~~bottom current~~ *Drift S. W.*

Force of ~~bottom current~~ *Drift 1/4 mile*

Name of vessel, *Fish Hawk.*

To what service attached, *U. S. F. C.*

Name and rank of commanding officer, *J. L. Tanner.*

Lieut. U. S. N.

Name and position of observer, *F. C. VanDliet,*

2nd.

x *Serials taken with N.Z. 42666.*

- Pecten tenuicostata*, few.
Asterias vulgaris.
Leptasterias compta, abundant.
Cribrella sanguinolenta, few.
Buccinum undatum, abdt.
Cyprina Islandica, abdt.
Echinarachnius parma (few)
Ophioglyphus Sarsii, (one)
Strongylocentrotus Drob., few.
Limanda ferruginea
Lophius piscatorius.
Pseudorhombus oblongus.
Phycis tenuis.
 " *chuss*.
Raja. sp.
Goarces anguillaris.
Collus 18. spinosus.
Merluccius bilinearis.
Raja erinacea?

Chester Rake Dredge,
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *815*

Date, *Aug. 18, 1880.*

Locality, *off Block I.*

Bearings, *Block I. Lt., N. W. by ^{N.} ~~W.~~*
17 miles.

Time of day, *2.15 P.M.*; of tide,

State of sky, *b. c.*

Temperature of air, *72*

" surface of water, *72. (n.z. 40007.*

x " at depth of *5* fathoms, *71° (108.56°, 20; 49°*

" of bottom, *48* *n.z. 42666.*

Depth, in fathoms, *29.*

Nature of bottom, *sand.*

Direction of surface current, *wind S.*

Force of surface current, *wind 2.*

Direction of bottom current, *Drift S. W.*

Force of bottom current, *Distance 1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

x. n.z. 42666.

815.

REMARKS.

fine sand very rich

Liparis sp. from *P. tenuicostatus*.
Merluccius bilinearis juv.

Dredge

TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra.*

Current number of observation, *816.*

Date, *Aug. 23.*

Locality, *Narragansett Bay.*

Bearings, *Brenton's Reef Lt. Ship.*
S. 3/4 S., 2 3/4 miles.

Time of day, *10.25 am.* of tide,

State of sky, *clear.*

Temperature of air, *71.*

" surface of water, *69.* *N. 3. 4000 f.*

" at depth of fathoms,

" of bottom, *66.* *N. 3. 4266 f.*

Depth, in fathoms, *8 1/2*

Nature of bottom, *sand.*

Direction of ~~surface current~~, *wind S.*

Force of ~~surface current~~, *wind 2.*

Direction of ~~bottom current~~, *Drift S. E.*

Distance ~~Force of bottom current~~, *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

816.

REMARKS.

fine sand, ^{and broken shells.} not very rich
in life. a variety of small
shells and some amphipods.
Echinacanthus parma, *neobro.*
leumacca,

Dredge
TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra*

Current number of observation, *817.*

Date, *Aug. 23.*

Locality, *Narragansett Bay.*

Bearings, *Brenton's Reef Lt. Ship
S. $\frac{1}{2}$ N. 3 miles.*

Time of day, *11 a.m.* ; of tide,

State of sky, *clear.*

Temperature of air, *72*

" surface of water, *68.* *N.Z. 40007.*

" at depth of fathoms,

" of bottom, *63.* *N.Z. 42666.*

Depth, in fathoms, *10.*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind* *S.*

Force of ~~surface current~~ *wind* *2.*

Direction of ~~bottom current~~ *Drift* *S. E.*

Force of ~~bottom current~~ *Drift* *$\frac{1}{4}$ mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

817.

REMARKS.

^{broken}
sand and shells

Fauna character as loc. 7.

Echinorachnus parva. many

Dredge
TEMPERATURE RECORD.

Instrument used,

Regatta Zambra.

Current number of observation,

818,

Date,

Aug. 23, 1880.

Locality,

Narragansett Bay.

Bearings,

Brenton's Reef Lt. Ship.

S. $1\frac{1}{2}$ N., $3\frac{1}{4}$ miles.

Time of day, *11.20 am*; of tide,

State of sky,

clear.

Temperature of air,

72.

"

surface of water,

68

N.Z. 40007.

"

at depth of

fathoms,

"

of bottom,

65

N.Z. 42666.

Depth, in fathoms,

9 $\frac{1}{2}$

Nature of bottom,

sand.

Direction of

wind

S.

Force of

wind

2.

Direction of

Drift

S. E.

Dist.

Drift

$\frac{1}{4}$ mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

818

REMARKS.

Same as last.

Nephthys incisa

Cumacea. abundant

Trawl
TEMPERATURE RECORD.

Instrument used, *Negretti Zambra.*
Current number of observation, *819*
Date, *Aug. 23, 1880.*
Locality, *Narragansett Bay.*
Bearings, *S. End Hope Island, S. E.*
by E. $\frac{1}{2}$ E., $\frac{1}{2}$ mile
Time of day, *1 P.M.*; of tide,
State of sky, *Clear.*
Temperature of air, *74.*
" surface of water, *73.* *N. 3. 40007.*
" at depth of fathoms,
" of bottom, *70.* *N. 3. 42666.*
Depth, in fathoms, *6.*
Nature of bottom, *mud.*
Direction of ~~surface current~~, *wind S. S. W.*
Force of ~~surface current~~, *wind 3.*
Direction of ~~bottom current~~, *drift N. S. W.*
Force of ~~bottom current~~, *Distance $\frac{1}{4}$ mile*
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

- Racina* brown in life.
Simulus polyphemus. ~~black~~
^{with reddish brown caudal rays and}
Eupagurus longicarpus. large
 " *pollicaris* many ant large
Ancistrus
Antennia *Horbesii*
Callista concolor (Whitely)
Fulgur canina
Sycostylum canaliculatus
Lobigo Realius med. and eggs
Libinia emarginata
Chaetopterus pergam tube
Molgula Markhami abund.
Halacium
Stenotomus argyrops.
Pseudopleuronectes Americanus.
Lophopsetta maculata.
Prionotus carolinus
Cynoscion regalis juv.
Engraulis vitellatus.
Pseudorhombus dentatus.
~~End of~~ N. J. 42666, tube protecting
 inner tube broken at end, and
 containing water. Protecting tube
 to bulb, also containing a little
 water in addition to mercury.
 some of the mercury escaping.

Trawl
TEMPERATURE RECORD.

Instrument used,

Recurrent gauge.

Current number of observation,

820

Date,

Aug. 23, 1880.

Locality,

Narragansett Bay.

Bearings,

S. end Hope Island

N. N. E., 1/4 mile.

Time of day, *1.40 P.m.*; of tide,

State of sky,

Clear.

Temperature of air,

76.

"

surface of water,

72.

N. J. 42666

"

at depth of

fathoms,

"

of bottom,

70

N. J. 40007.

Depth, in fathoms,

5 1/2

Nature of bottom,

muud.

Direction of

wind

~~surface current~~,

S. S. W.

Force of

wind

~~surface current~~,

4

Direction of

Drift

~~bottom current~~.

N. by S.

Force of bottom current,

Distance

1/4 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

820.

REMARKS.

Similar to last, but a great deal of mud with small broken shells common in layers.

Squilla empusa 2 spec.

Asterias Forbesii

Callinectes rusticus

Lycoteuthis canaliculatus

Hubbsia carica

Loligo Reali eggs.

Murex proxima

Gastropoda limaculata

Nephtys incisa

Meckelia lurida.

Synbranchia fuscus.

Pseudopleuroxestis americanus

Onos cymbrium juv.

TEMPERATURE RECORD.

Instrument used, *Requie's - Zambra.*

Current number of observation, *821.*

Date, *Aug. 23, 1880.*

Locality, *Narragansett Bay.*

Bearings, *S. End Hope I., N. by E.,
1/2 mile*

Time of day, *2.15 P.M.*; of tide,

State of sky, *clear.*

Temperature of air, *78.*

" surface of water, *72*

N. J. 42666

" at depth of fathoms,

" of bottom, *70.*

N. J. 40007.

Depth, in fathoms, *5.*

Nature of bottom, *mud.*

Direction of *wind*, *S. S. W.*

Force of *wind*, *4.*

Direction of *drift*, *S. W.*

Distance, *1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

821

REMARKS.

Similar to last,
Nephtys incisa
Meckelia lucida

Raia, sp. juv. one spec.
Pseudorhombus oblongus, juv.

Trawl
TEMPERATURE RECORD.

Instrument used, *Regretté-Zambra*
Current number of observation, *822*,
Date, *Aug. 23. 1880.*
Locality, *Kuraganu Bay.*
Bearings, *S. end of Hope Island.*
N. E., 1/8 mile.
Time of day, *3 P.M.*, : of tide.
State of sky, *clear.*
Temperature of air, *78.*
" surface of water, *71.* *N B. 42666.*
" at depth of fathoms,
" of bottom, *70.* *N B. 40007.*
Depth, in fathoms, *4 1/2*
Nature of bottom, *sand.*
Direction of ~~surface current~~ *wind* *S. S. W.*
Force of ~~surface current~~ *wind* *4.*
Direction of ~~bottom current~~ *drift* *W.*
Distance *1/4 mile.*
~~Force of bottom current.~~
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

mus. broken shells

Bugula turrita, covering net
Cerianthus borealis tube
Squilla empusa young
Hydroids *Tranthes*
Neptheys incisus
Nucula minor
Nucula proxima

Prionotus carolinus.
Lophopsetta maculata.
Stenotomus argyrops.
Cynoscion regalis, juv.
Tautoglabrus adspersus.
Physa tenuis.

Dredge
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *823.*

Date, *Aug. 24. 1880.*

Locality, *N. of Block I.*

Bearings, *North light, Block I.*

N. $\frac{1}{2}$ S., $1\frac{1}{2}$ miles.

Time of day, *12.35 P.M.*; of tide,

State of sky, *b. c.*

Temperature of air, *74.*

" surface of water, *65. N. 3. 46400.*

x " at depth of *5* fathoms, *63° (1 of. 63°*

" of bottom, *60 N. 3. 40007.*

Depth, in fathoms, *15 $\frac{1}{2}$*

Nature of bottom, *sand,*

Direction of ~~surface current~~ *wind N.*

Force of ~~surface current~~ *wind 3. $\frac{1}{4}$ mile*

Direction of ~~bottom current~~ *drift - N. N.*

distance $\frac{1}{4}$ mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

x *N. 3. 40007.*

REMARKS.

Fine and coarse sand.
Pecten tenuicostatus (Long)
Leptasterias conycta
Venericardia borealis
Echinarachnium parva
Strongylocentrotus drobachianus
Modiola modiolus small
Crangon vulgaris
Succinea unguiculata

824 Trawl.

TEMPERATURE RECORD.

Instrument used, *Reguelli Zambra,*
Current number of observation, *824.*
Date, *Aug. 24, 1880.*
Locality, *North of Block I.*
Bearings, *North E. of Block I., S. W.,*
1/4 W., 1 mile.
Time of day, *12.50 P.M.*; of tide,
State of sky, *Clear.*
Temperature of air, *74.*
" surface of water, *65.* *N. J. 46400.*
x " at depth of *5* fathoms, *63° (10 f. 63°)*
" of bottom, *67* *N. J. 40007.*
Depth, in fathoms, *13.*
Nature of bottom, *Sand.*
Direction of ~~surface current~~ *wind* *N.*
Force of ~~surface current~~ *wind* *3.*
Direction of ~~bottom current~~ *drift* *N. W.*
Force of ~~bottom current~~ *distance* *1/4.*
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

**N. J. 40007.*

824
REMARKS.

Laminaria myosotis obelia
 Pecten tenuicostatus abd
 Strongy. Drobach ^{extremus}
 Echinurachnum parvum
 Modiola modiolus
 Copepoda fornicata
 Loligo Reali
 Leptasterias Compta,
 Onchidium striatum
 Metridium marginatum
 Stylifer Steinfors
 Alcyonium carinatum.

Paratoga onitae,
 Paratogolabrus adspersus,
 Raia harrisi,
 Collis sp (young)
 Syngnathus monaculus
 Phycis tenuis,
 Pseudopleuronectes Americanus
 Pseudorhombus dentatus
 Raia erinacea
 " radiata
 Liparis in Pecten tenuicostatus
 Minolia carolinus
 Pseudorhombus oblongus.

Older Travel

TEMPERATURE RECORD.

Instrument used, *Regetei-Zambra*
Current number of observation, *825.*
Date, *Aug. 24, 1880.*
Locality, *N. of Block Island.*
Bearings, *N. Light of Block I., N. S.*
N. $\frac{3}{4}$ W., $1\frac{1}{4}$ miles.
Time of day, *1.30 P.M.*, of tide,
State of sky, *Clear.*
Temperature of air, *73.*
" surface of water, *67.* *N. 46400*
" at depth of *5* fathoms, *61.* *N 3.40007*
" of bottom, *60.* "
Depth, in fathoms, *13.*
Nature of bottom, *sand.*
Direction of ~~wind~~ *wind*, *N. S. W.*
Force of ~~wind~~ *wind*, *4.*
Direction of ~~surface current~~ *Drift*, *N. W.*
Distance *$\frac{1}{2}$ mile*
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

sand, similar to last, but
less in variety and bulk.
Echinorachnius common, making
up most of bulk.

Strongly prob. very abt.

Pecten tenuicostatus

Lunatia here

Stylifer Stigmaria

Martia solidissima sand

Cancer incrustatus

Eupagurus Bernhardtii

Raia (Sp.)

Pseudorthombus dentatus

Leptopsella maculata

Pseudopleuronectes Americanus

Prionotus carolinus

Dredge.
TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra.*
Current number of observation, *826.*
Date, *Aug. 24, 1880.*
Locality, *North of Block. I.*
Bearings, *North light of Block Island*
N. N. W. $\frac{1}{2}$ W., 2 $\frac{1}{2}$ miles.
Time of day, *2.40 P.M.*; of tide,
State of sky, *clear.*
Temperature of air, *73.*
" surface of water, *67° N.B. 46400.*
" at depth of *5* fathoms, *66. N.B. 40007*
" of bottom, *57.* "
Depth, in fathoms, *22.*
Nature of bottom, *sand.*
Direction of ~~surface current~~ *wind* *S.*
Force of ~~surface current~~ *wind* *3.*
Direction of ~~bottom current~~ *drift* *S. S. W.*
~~Force of bottom current~~ *Distance* *$\frac{1}{4}$ mile*
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

sand & mud.
Echinorachium *barrowi*, *Amey*
Venericardia *borealis*, *larger* at 10
Cypria, *Islandia*.
Aphrodite *aculeata*.
Nereis *nigripes*
Sthenelasma *Emertonii*.
Alcioida, *viridis*
Ptilochinus *punguis*
Amphipoda *microcephala*
 sp? *small*
Diastylis *sp?*
Eurya *pilularis*.
Leptasterium *complanatum*
Leptasterium *vittata* (near to 5. of *Cuba*)
Phoron *chamaeleon*
Eupagurus *bernardus*
Squilla *pinnata*
Libinia *brachyura*
Yoldia *brachyura*
Astarte *undata* (large)
Tridacna *tridactyla*

Blake Trawl

TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra*
Current number of observation, *827.*
Date, *Aug. 24. 1880.*
Locality, *North of Block I.*
Bearings, *North light of Block I.,*
N. N. W. $\frac{1}{2}$ W. $2\frac{1}{2}$ miles.
Time of day, *3.05 P.M.*, of tide,
State of sky, *Clear.*
Temperature of air, *71.*
" surface of water, *67° N. 3. 46400.*
" at depth of *5* fathoms, *66. N. 3. 40007.*
" of bottom, *57.* "
Depth, in fathoms, *20 $\frac{1}{2}$*
Nature of bottom, *Sand.*
Direction of *wind S.*
Force of *wind 3.*
Direction of *Drift*
Force of bottom current, *Distance*
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

827.

REMARKS.

~~Nothing came up~~
Echinodermata *parvifera*
Euphrosyne *conflua*
Chama *brevis*
Eupagurus *Barbierius*
Cochia *vulgaris*
Lotia *Reali*
Pandalus *Montagu*

Two hauls were made and
 included under this number.
 The first brought up nothing.
 The second but very little,
 all the Invertebrates being
 contained in the above list.
 The reason assigned was that
 a sixty lb. ball was attached
 to end of bag, causing the
 runners to raise high in
 the water when the strain
 came upon them

Physic *ferus*
Rain *exinacea*

Dredge.

TEMPERATURE RECORD.

Instrument used, *Regretté - Zambra.*

Current number of observation, *828.*

Date, *Aug. 25, 1880.*

Locality, *off North of Block Island.*

Bearings, *North Lt. Block I., S. W.*

by W. $\frac{3}{4}$ N., $2\frac{1}{2}$ miles.

Time of day, *12.40 P.M.* of tide,

State of sky, *Stormy.*

Temperature of air, *70.*

" surface of water, *66.* *N. 3. 46400*

" at depth of fathoms,

" of bottom, *60.* *N. 3. 40007.*

Depth, in fathoms, *15.*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind*, *N. N. E.*

Force of ~~surface current~~ *wind*, *6.*

Direction of ~~bottom current~~ *drift*, *E. N. E.*

Distance *$\frac{1}{4}$ mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

But very little came up
sandy bottom.

Echinarachnius parma.

Stereoderma unisemita

Cirolana ?

Rephrys

Small sandy ascidian

(*Eugyra pilularis*??)

few small shells.

This was the beginning of
a two day's trip. The morning
opening with fair prospects,
but a North East wind struck
us, just about as the
above dredge went down
and we were obliged to
return to port.

Dredge
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *829.*

Date, *Aug. 27, 1880.*

Locality, *off Mouth of Sakonnet R.*

Bearings, *Cormorant Rock, N. W. by N.
1/4 mile*

Time of day, *10.45 am.* of tide,

State of sky, *Clear.*

Temperature of air, *63,*

" surface of water, *66.* *N. 3. 4 26 66.*

" at depth of fathoms,

" of bottom, *65.* *N. 3. 4 00 07.*

Depth, in fathoms, *9.*

Nature of bottom, *gravel and stones.*

Direction of ~~surface current~~ *wind* *E.*

Force of ~~surface current~~ *wind* *2.*

Direction of ~~bottom current~~ *drift* *S. by E.*

Distance
Force of ~~bottom current~~ *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

829.

REMARKS.

gravel, fine and coarse.
 nearly barren
 Red Mullipore
 Delicate red sea weeds abn.
 Cithona kempferi few
 Bryozoa on seaweeds, many
 Asterias Forbesii, 1
 Cochella 2 angulata 2 small
 Ophiopholis aculeata 1.
 Canace (2 small) 3 or 4.
 Chiton marmoratus 2 or 3.
 Crepidula fornicata 2
 Modiola modiolus 1.
 Balanus few

Dredge
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*

Current number of observation, *830.*

Date, *Aug. 27. 1880.*

Locality, *Off Mouth of Sakonnet River*

Bearings, *West Island, S. E. by E.*

1/2 E. , 3/4 mile,

Time of day, *11. 15 am*; of tide,

State of sky, *clear.*

Temperature of air, *64,*

" surface of water, *66,* *N. 3. 42666,*

" at depth of fathoms,

" of bottom, *65.* *N. 3. 40007.*

Depth, in fathoms, *10 1/2*

Nature of bottom, *sand.*

Direction of *wind* *E.*

Force of *wind* *2,*

Direction of *drift* *N. E. 1/2 E.*

distance *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

830.

REMARKS.

Sand and gravel, without
red algae. ~~no~~ ~~much~~ (black)
Cham last

Many stones covered with
barnacles. Dead shells.

Small living shells.

Few annelids

Cancer irroratus

Eupagurus Bernhardus, a shell

covered with Hydactinia,

Hydactinia ^{Forbesii} (one)

Dredge
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*
Current number of observation, *831.*
Date, *Aug. 27. 1880.*
Locality, *Sakonnet River*
North End of Gould Island
Bearings, *S. W. 1/4 W. 350 yards.*

Time of day, *12.30 P.M.* of tide,

State of sky, *clear.*

Temperature of air, *68.*

" surface of water, *71.* *W. 42666,*

" at depth of fathoms,

" of bottom, *71.* *W. 40007.*

Depth, in fathoms, *6.*

Nature of bottom, *black mud.*

Direction of ~~surface current~~ *wind S. E.,*

Force of ~~surface current~~ *wind 1.*

Direction of ~~bottom current~~ *drift S.*

~~Force of bottom current~~ *distance 1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

831.

REMARKS.

A black. or dark brown, soft
 & fetid mud. with
Nucula proxima, very abdt
Mulinia lateralis.
Goldia limatula larger
 Also some other species.

This same character of
 bottom continued through
 834, but the first one or
 two hauls, had the
 strongest smell. The
 mud seemed to become
 purer or clearer in character
 down river and 835 had
 no smell whatever, although
 it was a genuine soft
 mud.

Dredge
TEMPERATURE RECORD.

Instrument used. *Regretté & Zambra*
Current number of observation. *832*
Date. *Dec. 27, 1880.*
Locality, *Sakonnet River.*
Bearings. *N. End. of Gould Island.*
West, 150 yards.
Time of day, *12.45 P.m.* of tide,
State of sky. *Clear.*
Temperature of air, *70.*
" surface of water, *71.* *N. 3. 42666.*
" at depth of fathoms,
" of bottom, *71.* *N. 3. 40007.*
Depth, in fathoms, *9.*
Nature of bottom, *Black mud,*
mud
Direction of ~~surface current~~, *S. E.,*
wind
Force of ~~surface current~~, *1,*
drift-
Direction of ~~bottom current~~, *S.*
Distance
From ~~of bottom current~~, *1/4 mile*
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

832.

REMARKS.

Same as last.

Chester Lake Dredge

TEMPERATURE RECORD.

Instrument used, *Regnetti & Zambra*

Current number of observation, *833.*

Date, *Aug. 27, 1880.*

Locality, *Sakonnet River.*

Bearings, *South End of Gould Island
100 yards.*

Time of day, *1 P.m.*; of tide,

State of sky, *clear*

Temperature of air, *70.*

" surface of water, *71.* *N. 3. 42666.*

" at depth of fathoms,

" of bottom, *71.* *N. 3. 40007.*

Depth, in fathoms, *6 1/2*

Nature of bottom, *mud.*

Direction of ~~surface~~ ^{*wind*} current, *S. E.*

Force of ~~surface~~ ^{*wind*} current, *1.*

Direction of ~~bottom~~ ^{*drift*} current, *S.*

~~Distance of bottom current.~~ ^{*Distance*} *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

833.

REMARKS.

Same in character as Cast.

Chester Lake Bridge.
TEMPERATURE RECORD.

Instrument used, *Requetti-Zambra*

Current number of observation, *834.*

Date, *Aug. 27. 1880.*

Locality, *Lakonnet River.*

Bearings, *McCurry's Point N. S. W.*

3/4 mile.

Time of day, *1.30 P.M.*; of tide.

State of sky, *Clear*

Temperature of air, *63.*

" surface of water, *73.* *N. 3. 42666.*

" at depth of fathoms,

" of bottom, *71.* *N. 3. 40007.*

Depth, in fathoms, *11.*

Nature of bottom, *mud.*

Direction of wind, *E.*

Force of wind, *2.*

Direction of trip, *N. by E.*

Distance *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Same as last.
 In addition to large numbers of
Nucula proxima. There were
Crepidula fornicata, *bayaboi*, *slat*,
Goldia limatula liv.
Sycolytus canaliculatus
Littorina canaliculata 2.
Macrosoma prolifera 1 Dead.
Nephtys
Cisternides Gouldii.
Crepidula *pollicaris*, one
 " *longicauda* one.
Cancer (young)
Mulinia lateralis.

Chester Lake Bridge

TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra*

Current number of observation, *835.*

Date, *Aug. 27, 1880.*

Locality, *Sakonnet River.*

Bearings, *McCurry's Point N. 1/4 E.*
1 1/4 miles.

Time of day, *1.50 P.M.*; of tide,

State of sky, *Clear.*

Temperature of air, *68.*

" surface of water, *73.* *N. 3, 42666.*

" at depth of fathoms,

" of bottom, *71.* *N. 3, 40007.*

Depth, in fathoms, *3 1/2*

Nature of bottom, *mud and shells.*

Direction of ~~surface current~~ *wind*, *S. E.*

Force of ~~surface current~~ *wind*, *2.*

Direction of ~~bottom current~~ *drift*, *N.*

~~Force of bottom current~~ *distance*, *1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Soft mud, broken and dead shells.
~~Same as last.~~ Great number
 of dead shells. The material
 being largely composed of Chama.
 Crepidula fornicata. Anomia
 flabra Dead, and some or less
 decayed, and many covered
 with ^{red} encrusting bryozoa

Libinia canaliculata

Chester Lake Bridge.

TEMPERATURE RECORD.

Instrument used, *Regretté-Zambra*
 Current number of observation, *836*
 Date, *Aug. 27, 1880.*
 Locality, *Lakonnet River.*
 Bearings, *Black Point, N. 1/4 N.,*
1/2 mile
 Time of day, *2.25 P.M.*; of tide,
 State of sky, *Clear.*
 Temperature of air, *66.*
 " surface of water, *71.* *N. 3. 42666,*
 " at depth of fathoms,
 " of bottom, *71.* *N. 3. 40007.*
 Depth, in fathoms, *5.*
 Nature of bottom, *sand.*
 Direction of ~~surface current~~, *wind S. S. E.*
 Force of ~~surface current~~, *wind 2*
 Direction of ~~bottom current~~, *drift S. S. W.*
~~Force of bottom current~~, *distance 1/4 mile*
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

836

REMARKS.

Trawl but very little bottom material came up.

Many small hermit crabs

Bugula *furcata*

Ensatella americana

Platysinus *ocellatus* many young

Sibinia *canaliculata* : many

Eupagurus *longicarpus* in *Tritia*

trichotoma, *Nereis*, etc. made out

the larger part of the haul.

Eupagurus *polliaei* also occurred but was rare. Two or three

Trawl

TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *837.*

Date, *Aug. 27, 1880.*

Locality, *Lakounet River.*

Bearings, *Black Point N. W. by W.*

1/2 W., 1/2 mile

Time of day, *2.45 P.M.*; of tide,

State of sky, *Clear.*

Temperature of air, *69.*

" surface of water, *71.* *N. 3. 42666.*

" at depth of fathoms,

" of bottom, *71.* *N. 3. 40007.*

Depth, in fathoms, *5.*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind*, *S. S. E.*

Force of ~~surface current~~ *wind*, *2.*

Direction of ~~bottom current~~ *drift*, *S. by E.*

Force of ~~bottom current~~ *distance*, *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

Libinia emarginata, ^{small} many
Cancer irroratus ? 7-10
Platysomus ocellatus ^{young} many
Neorita duplicata ^{several}
Fulgur calca, ^{several}
Sycotypus canaliculatus "
Loligo Pealii, 2.
Eupagurus pollicaris 7-10
Crepidula plana "
Bugula turrita "
Asterias Forbesii, few.
Pantogolabus adpersus
Lophopsetta maculata
Cynoscion regalis, juv. Numerous
Eleutherois vittatus
Rodonotus triacanthus, abd.
Pseudophrynosoma ^{América, 100}
Pseudophrynosoma dentatus
 " *oblongus*
Prionotus Carolinus (juv. abd.)
 " *volans*, " rare
Raja erinacea ?
Mentemora nebulosa
Siphonostoma fuscum

Travel
TEMPERATURE RECORD.

Instrument used, *Regatta's Zambra*
Current number of observation, *838.*
Date, *Aug. 27. 1880.*
Locality, *Lakounet River.*
Bearings, *Wood's Castle N. by N.,*
1 mile.
Time of day, *3.15 P.M.*, of tide,
State of sky, *clear.*
Temperature of air, *66.*
" surface of water, *70* *N. 3. 42666.*
" at depth of _____ fathoms,
" of bottom, *68.* *N. 3. 40007.*
Depth, in fathoms, *5 1/2*
Nature of bottom, *sand.*
Direction of surface current, *wind S. S. E.*
Force of surface current, *wind 2.*
Direction of bottom current, *drift - S. by E.*
Force of bottom current, *drift 1/4 mile.*
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

Large quantities of jelly fish,
mostly *Mnemiopsis leidyi*, some
Gammarus, *Caprellus*, etc., caught
in the net.

Very little material

Sycopterus canaliculatus

Bugula turrita (much)

Platyonichus ocellatus, one seen.

Crepidula plana.

Epinarrachnion panna, one

Sibinia canaliculata

Euspagurus pollicaris, many

Poronotus triacanthus

Chitichthys turgidus (one)

Mionotus caecilius

Raja erinacea

Pseudorhombus dentatus

Stenotomus argyrops

Lophopsetta maculata

Dredge
TEMPERATURE RECORD.

Instrument used, *Regatta - Zambra*

Current number of observation, *839.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay*

Bearings, *Dumplings N. N. $\frac{1}{2}$ E. N.*
300 yards.

Time of day, *9.50* ; of tide,

State of sky, *b.c.*

Temperature of air, *67.*

" surface of water, *67.* *N. J. 42 66 6.*

N. J. 40007 " at depth of *5* fathoms, *62° (10 f. 65°*

" of bottom, *61.* *N. J. 40007.*

Depth, in fathoms, *27 $\frac{1}{2}$*

Nature of bottom, *gravel*

Direction of ~~surface current~~ *wind* *N. N. E.*

Force of ~~surface current~~ *wind* *2*

Direction of ~~bottom current~~ *drift* *S. N.*

dist " *$\frac{1}{4}$ mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

839.

REMARKS.

Sand and gravel. Limestone
rich in life.

Large quantities of Laminaria
and other seaweeds,
with Obelia dichotoma
and Bugula.

Cancer borealis? young
" irritata? "

Bugula turrita

Bugula eximius stolon

Crucibulum striatum

Astrea undatum

Vermetaria borealis.

Antennas Forbesii.

Dredge
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *840.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Dumplings N. by N. $\frac{1}{2}$ N.
100 yards.*

Time of day, *10.05 am*; of tide,

State of sky, *b. c.*

Temperature of air, *67.*

surface of water, *67. (N. 3. 42666)*

3.3. 40007 at depth of *5* fathoms, *65° (107. 65°)*

" of bottom, *61 (N. 3. 40007.)*

Depth, in fathoms, *20 $\frac{1}{2}$*

Nature of bottom, *gravel.*

Direction of ~~surface current~~, *wind N. N. E.*

Force of ~~surface current~~, *" 2.*

Direction of ~~bottom current~~, *dip-*

dist. "
~~Force of bottom current.~~

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

840

REMARKS.

Same as last.

Dredg.
TEMPERATURE RECORD.

Instrument used, *Reggelli-Zambra*

Current number of observation, *841.*

Date, *Aug. 31, 1880.*

Locality, *Narragansett Bay*

Bearings, *Rhode Island Lt., N. E. by E. 3/4 E., 7/8 mile.*

Time of day, *10.45 a.m.* of tide,

State of sky, *b. c.*

Temperature of air, *68.*

" surface of water, *67. (N. J. 42666.*

N. J. 40007 " at depth of *5* fathoms, *67 (10 f. 65°*

" of bottom, *60 (N. J. 40007*

Depth, in fathoms, *21.*

Nature of bottom, *gravel.*

Direction of ~~surface current~~, *with E. N. E.*

Force of ~~surface current~~, *" 2.*

Direction of ~~bottom current~~, *Drift S.*

Dist. " 1/4 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

841.

REMARKS.

mod. sand large stones.

Halimolobos Fendleri

Metridium marginatum

Negetli. Zambra
TEMPERATURE RECORD.

Instrument used, *Negetli. Zambra*

Current number of observation, *842.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay*

Bearings, *Goat Island Lt., E. N.E.*

1/2 E., 1/2 mile.

Time of day, *11. am.* ; of tide,

State of sky, *clear.*

Temperature of air, *69.*

" surface of water, *67.*

(N. 3. 42666

" at depth of fathoms,

" of bottom, *67.*

N. 3. 40007.

Depth, in fathoms, *8.*

Nature of bottom, *sand.*

Direction of *wind* ~~surface current~~, *east*

Force of ~~surface current~~, *2.*

Direction of *Drift* ~~bottom current~~,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

842

REMARKS.

Trawl
TEMPERATURE RECORD.

Instrument used, *Regatta - Zambra*

Current number of observation, *843*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay.*

Bearings, *N. end of Dyer's Island N. E.
1/2 E., 3/4 mile*

Time of day, *12 M.*; of tide,

State of sky, *clear.*

Temperature of air, *69.*

" surface of water, *69 (N. 3. 42666)*

" at depth of *5* fathoms, *67 (N. 3 4000 f.)*

" of bottom, *63* "

Depth, in fathoms, *14 1/2*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind East.*

Force of ~~surface current~~ *3.*

Direction of ~~bottom current~~ *Drift - N.*

Dist. " 1/4 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Asterias Forbesii, many.
Cribrella sanguinolenta
Homarus Americanus
Cancer borealis ?

Pseudorthombus ventatus
Pseudopleuronectes Americanus
Liparis maculata
Raja sp.
Phycis sp.
Phycis tenuis
Pseudorthombus elongatus
Gnathoponops regalis
Stenotomus argenteus

Trawl

TEMPERATURE RECORD.

Instrument used, *Negretti Zambra*

Current number of observation, *844*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay,*

Bearings, *N. end of Dyer's I., S. E. $\frac{1}{2}$ E., $\frac{1}{4}$ mile.*

Time of day, *12.30 P.M.*; of tide,

State of sky, *Clear*

Temperature of air, *70.*

" surface of water, *69* *(11.3. + 2666*

" at depth of *5* fathoms, *67.* *(11.3. + 0007.*

" of bottom, *68.* *"*

Depth, in fathoms, *11 $\frac{1}{2}$*

Nature of bottom, *sand*

Direction of ~~surface current~~ *wind*, *E.*

Force of ~~surface current~~, *2.*

Direction of ~~bottom current~~ *drift*, *N. S. W.*

dist. " *$\frac{1}{4}$ mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Much Laminaria, Rockweed,
and other sea weeds.

Asterias Forbesii

Crepidula sanguinolenta

Homarus Americanus young

Libinia young

Arbacia punctulata young

Many broken shells covered
with byzonia etc.

Raja sp.

Lophopsetta maculata.

Pseudopleuronectes americanus

Physa tenuis,

Synbranchia fuscus,

Chaetogobius a. dispersus,

Trawl
TEMPERATURE RECORD.

Instrument used, *Reguetti-Zambra.*

Current number of observation, *845.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Providence Light, N. $\frac{1}{2}$ N.
 $\frac{3}{4}$ mile*

Time of day, *1 P.M.* ; of tide,

State of sky, *Clear.*

Temperature of air, *70.*

" surface of water, *69.* (*113.42666.*)

" at depth of *5* fathoms, *67.* (*113.40007.*)

" of bottom, *64.* "

Depth, in fathoms, *14 $\frac{1}{2}$*

Nature of bottom, *Gravel.*

Direction of *wind* ~~surface current~~, *N. E.*

Force of ~~surface current~~, *3.*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

845

REMARKS.

Caught on rock, very little
came up.

Asterias Forbesii, small

Augula turrita

sponges

Crepidula fornicata

Physio tenuis

Rala sp. (few)

Chester Lake Dredge.

TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*

Current number of observation, *846.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay*

Bearings, *Providence St., N. by E.
3/4 E., 1 1/2 miles.*

Time of day, *1.35 P.m.*; of tide,

State of sky, *Clear.*

Temperature of air, *70.*

" surface of water, *68. (N. 3. 42666)*

" at depth of *5* fathoms, *67. (N. 3. 40007.)*

" of bottom, *63.* "

Depth, in fathoms, *14 1/2*

Nature of bottom, *gravel.*

Direction of ~~surface~~ *wind* *N. E.*

Force of ~~surface~~ *"* *3.*

Direction of ~~bottom~~ *Drift* *E. N. E.*

Dist. " 1/4 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

846.

REMARKS.

Bay nearly full of sand,
mud with broken shells,
Moderately rich in life.
Asterias Forbesii.
Cribrella sanguinolenta.
Cancer (young)
Many shells.
Callinassa Stimpsoni.

Trawl

TEMPERATURE RECORD.

Instrument used, *Requien-Zambra.*

Current number of observation, *847.*

Date, *Aug. 31. 1880.*

Locality, *Nanagansett Bay.*

Bearings, *Half way Rock, N. $\frac{1}{4}$ W.,
1 mile.*

Time of day, *2.15 P.m.*; of tide,

State of sky, *Clear.*

Temperature of air, *70.*

" surface of water, *68. (N. 3. 42666*

" at depth of *5* fathoms, *68. (N. 3. 40007.*

" of bottom, *62. (N. 3. 40007.*

Depth, in fathoms, *12 $\frac{1}{2}$*

Nature of bottom, *mud.*

Direction of ~~surface~~ *wind* current, *E.*

Force of ~~surface~~ *"* current, *3.*

Direction of ~~bottom~~ *Drift* current, *N. N. E.*

Dist. " Force of bottom current, *$\frac{1}{4}$ mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

847.

REMARKS.

The bag took in large
quantity of mud, but
rope came out at lower
end of bag, letting out
most of contents.

amphipods - abundant
" " " "

annelids.

Callinassa & Stimpsonia.

Trawle

TEMPERATURE RECORD.

Instrument used, *Regretté-Zambra*

Current number of observation, *8488*

Date, *Aug. 31, 1880.*

Locality, *Narragansett Bay,*

Bearings, *Bishop's Rock, East,
1/2 mile.*

Time of day, *3 P.M.*; of tide,

State of sky, *Clear.*

Temperature of air, *69.*

" surface of water, *68. (N. 3. 42666.*

N. 3. 40007. at depth of *5* fathoms, *68° (10 f. 67°*

" of bottom, *62* *N. 3. 40007.*

Depth, in fathoms, *15 1/2*

Nature of bottom, *mud.*

Direction of ~~surface current~~ *wind* *S. E.*

Force of ~~surface current~~ *"* *3.*

Direction of ~~bottom current~~ *Drift.* *N.*

Dist. *"* *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Many Laminaria, and
other seaweeds.

Homonas americana 1,
Sycotus cancellatus
Cyprina Islandica, 1, fresh
Cancer carolinensis
Astoria Forbesii
" vulgaris 1.

Raja erinacea
Pseudopleuronectes americanus
Lopholatilus chamaeleleon
Pseudorhombus oblongus
Stenotomus argenteus
Physiculus tenuis
Agoniscus regalis
Tautoglabrus adspersus

Rake Dredge TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra,*

Current number of observation, *849.*

Date, *Sept. 1. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Ft. Dumping N. N. W. $\frac{1}{2}$ W.*
 $\frac{1}{4}$ mile.

Time of day, *9.20* ; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *67.*

n. 3. 40007 surface of water, *67* (*n. 3. 42666.*

at depth of *5* fathoms, *67°* (*107. 66°*

" of bottom, *63.* , *n. 3. 40007.*

Depth, in fathoms, *20.*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind* *variable*

Force of ~~surface current~~ *4* *1.*

Direction of ~~bottom current~~ *Drift* *S. W.*

Dist. " *$\frac{1}{4}$ mile.*

~~Force of bottom current.~~

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

849.

REMARKS.

Sand, gravel, shells.

Many Hydroids.

Astrea vulgaris 3.

" *Forbesii* 5.

Eupagurus longicarpus many

Corbula marginulenta (Du) many

few annelids.

Cynthia canis.

Eupagurus pallidus.

Cancer borealis (me)

Pantodolabrus adspersus.

Synchaeta fuscus.

Rake Dredge
TEMPERATURE RECORD.

Instrument used, *Regretté-Jambon*

Current number of observation, *858.*

Date, *Sept. 1. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Fr. Dimpling. E. N. E.
1/2 E., 1/2 mile.*

Time of day, *9.40 am.*; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *67.*

" surface of water, *67. (N. 3. 42.666,*

N. 3. 40.007
at depth of *5* fathoms, *67° (10 f. 66°*

" of bottom, *63. (N. 3. 40.007.*

Depth, in fathoms, *14 1/2*

Nature of bottom, *shells.*

Direction of ~~surface current~~ *wind East.*

Force of ~~surface current~~ *" 2.*

Direction of ~~bottom current~~ *drift S. S. W.*

Dist. "
~~Force of bottom current.~~ *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

850.

REMARKS.

Sand. large quantities of
sand & shells.
Eupagurus longicauda^{has}
Scarcely anything else in
quantity.

Bake Bridge
TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra*

Current number of observation, *857.*

Date, *Sept. 1. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Beaver Tail Pt., S. N. $\frac{1}{4}$ N.
 $1\frac{3}{4}$ miles.*

Time of day, *10. am.* ; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *66.*

" surface of water, *67. (N. 3. + 2666.*

" at depth of *5* fathoms, *66° (N. 3. 4000 f.*

" of bottom, *66.* "

Depth, in fathoms, *12 $\frac{1}{2}$*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind*, *S. E.*

Force of ~~surface current~~ *"*, *2.*

Direction of ~~bottom current~~ *drift*, *S.*

Dist. *"* *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

857.

REMARKS.

Much Laminaria sand and
gravel.

Syngnathus fuscus,

Trawl
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*

Current number of observation, *852,*

Date, *Sept. 1, 1880.*

Locality, *Narragansett Bay,*

Bearings, *Beaver Tail Light, S. S. W.
3/4 W., 2 1/8 miles.*

Time of day, *10.35 am;* of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *67.*

" surface of water, *67.* (*113.42666*)

" at depth of fathoms,

" of bottom, *66.* (*113.40007.*)

Depth, in fathoms, *2 1/2*

Nature of bottom, *sand.*

Direction of ~~surface current~~, *wind East.*

Force of ~~surface current~~, *1.*

Direction of ~~bottom current~~, *Drift, S.*

Dist, " 1/4 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

*Note - Mid-channel in Blackwell
Cove.*

REMARKS.

Many dead ones. *Laminaria*
Foligo Reali young.
Echinarachne parva.
Homarus Americanus
Eupagurus pollicaris.

Stenotomus argyrops.
Pseudopleuronectes Americanus.
Lophopsetta maculata.
Raja erinacea.
Prionotus Carolinus
Sautogolabrus adspersus
Syngnathus fuscus.
Pseudorhombus dentatus.

Trawl.
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*

Current number of observation, *853.*

Date, *Sept. 1, 1880.*

Locality, *Nanagansett Bay.*

Bearings, *Beaver Tail Lt. S. W. by S.,
2 miles.*

Time of day, *10.50 am*; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *68.*

" surface of water, *67.* *N. 3. + 2666*

" at depth of fathoms,

" of bottom, *67.* *N. 3. 40007.*

Depth, in fathoms, *4 1/2*

Nature of bottom, *Sand.*

Direction of ~~surface~~ ^{*main*} current, *E. ast.*

Force of ~~surface~~ ["] current, *1.*

Direction of ~~bottom~~ ^{*Drift*} current, *S.*

Dist. " Force of bottom current, *1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

*Note - Mid channel in MacKenzie
Cove.*

REMARKS.

Laminaria.

Homarus Americanus (young) ^{many}

Squilla emarginata

Loligo Pealii? young.

Sophopsesta maculata.

Pseudosquilla dentata.

Pseudopleuronectes Americanus.

Stomatopus argyrops.

Cynoscion regalis

Raja

Parionotus carolinus

Tautoglabrus adspersus.

Trawl
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *854.*

Date, *Sept. 1, 1880.*

Locality, *Narragansett Bay.*

Bearings, *Beaver Tail Lt. S. N. 1/4 S.
1 3/4 miles.*

Time of day, *11.10 am*; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *69.*

" surface of water, *67. (N. 3. 4 2666.*

" at depth of fathoms,

" of bottom, *67. (N. 3. 4 0007.*

Depth, in fathoms, *6.*

Nature of bottom, *sand.*

Direction of *wind* *S. E.*

Force of *surface current*, *1.*

Direction of *drift* *S.*

Dist. " *1/4 mile.*

Force of bottom current.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

*mid channel in Mackerel
Cover*

Same in character as last.
Limulus Polyphemus
Homarus Americanus

Stenotomus argenteus.
Poionotus Carolinus.
Pseudorhombus dentatus.
Tautoglabrus adspersus.
Pseudopleuronectes Americanus
Lophopsetta maculata.
Cynoscion regalis.

Trawl.
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*
Current number of observation, *855.*
Date, *Sept. 1. 1880.*
Locality, *Narragansett Bay.*
Bearings, *Beaver Tail Pt., S. W.
by S., 2 miles.*
Time of day, *11.40 am.*; of tide, *ebb.*
State of sky, *clear.*
Temperature of air, *70.*
" surface of water, *68. (N. 3. 42666*
" at depth of fathoms,
" of bottom, *68. (N. 3. 40007*
Depth, in fathoms, *3 1/2*
Nature of bottom, *sand.*
Direction of ~~surface~~ *wind* *E.* current,
Force of ~~surface~~ *wind* *1.* current,
Direction of ~~bottom~~ *Drift.* current, *S.*
Force of ~~bottom~~ *Drift.* current, *1/4 mile*
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

Same as last.

Hormurus Americanus Many
Sycotypus canaliculatus 2
Callinectes hastatus 1
Limulus 1
Eupagurus pollicatus 1.

Raja erinacea,
Chilichthys turgidus,
Stenotomus argyrops,
Pseudopleuronectes americana,
Lophopsetta maculata,
Syngnathus fuscus,
Prionotus carolinus.

Rake Dredge,
TEMPERATURE RECORD.

Instrument used, *Negetti-Zambra*
Current number of observation, *856.*

Date, *Sept. 1. 1880.*

Locality, *Narragansett Bay,*

Bearings, *Beaver Tail Light.*

S. N. $\frac{1}{2}$ N., $1\frac{3}{8}$ miles.

Time of day, *12.05 P.m.* of tide,

State of sky, *Clear.*

Temperature of air, *69.*

" surface of water, *68. (N.B. 42666.)*

" at depth of fathoms,

" of bottom, *67 (N.B. 40007.)*

Depth, in fathoms, *11.*

Nature of bottom, *Gravel.*

Direction of ~~surface current~~ *Wind S.*

Force of ~~surface current~~ *" 2.*

Direction of ~~bottom current~~ *Drift S. S. E.*

Force of ~~bottom current~~ *Drift. $\frac{1}{4}$ mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

856.

REMARKS.

Cyprina Islandia, ^{live} Several
Adult. Small, broken shells.
Laminaria
Mytilus Adult

Rake Dredge

TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*
Current number of observation, *857*.
Date, *Sept. 1, 1880.*
Locality, *Nanagansett Bay.*
Bearings, *Beaver Tail Pt., N.S.W.*
3/4 W., 6/10 mile.
Time of day, *12.35 P.M.* of tide,
State of sky, *b.c.*
Temperature of air, *69.*
" surface of water, *63* (*N. 3. 42666*)
" at depth of *10* fathoms, *66.5* (*N. 3. 40007*)
" of bottom, *66.* "
Depth, in fathoms, *19.*
Nature of bottom, *sand.*
Direction of ~~surface~~ *wind* current, *S. E.*
Force of ~~surface~~ *"* current, *2.*
Direction of ~~bottom~~ *drift* current, *S. E.*
Dist. " Force of bottom current, *1/4 mile.*
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

857.

REMARKS.

& other seeds.

Large quantities *Laminaria*
Sand.

858.

Rake dredge.

Coarse sand broken shells,
Cancer borealis

$$7.30 - 67,$$

$$7.45 = 67$$